

C L A I M S :

1. A peptide having the following amino acid sequence:

Val-Ala-Leu-Asn-Ser-Pro-Leu-Ser-Gly-Gly-Met-Arg-Gly-Ile-Arg-
Gly-Ala-Asp-Phe-Gln-Cys-Phe-Gln-Gln-Ala-Arg-Ala-Val-Gly-Leu-
Ala-Gly-Thr-Phe-Arg-Ala-Phe-Leu-Ser-Ser-Arg-Leu-Gln-Asp-Leu-
Tyr-Ser-Ile-Val-Arg-Arg-Ala-Asp-Arg-Ala-Ala-Val-Pro-Ile-Val-
Asn-Leu-Lys-Asp-Glu-Leu-Leu-Phe-Pro-Ser-Trp-Glu-Ala-Leu-Phe-
Ser-Gly-Ser-Glu-Gly-Pro-Leu-Lys-Pro-Gly-Ala-Arg-Ile-Phe-Ser-
Phe-Asp-Gly-Lys-Asp-Val-Leu-Arg-His-Pro-Thr-Trp-Pro-Gln-Lys-
Ser-Val-Trp-His-Gly-Ser-Asp-Pro-Asn-Gly-Arg-Arg-Leu-Thr-Glu-
Ser-Tyr-Cys-Glu-Thr-Trp-Arg-Thr-Glu-Ala-Pro-Ser-Ala-Thr-Gly-
Gln-Ala-Ser-Ser-Leu-Leu-Gly-Gly-Arg-Leu-Leu-Gly-Gln-Ser-Ala-
Ala-Ser-Cys-His-His-Ala-Tyr-Ile-Val-Leu-Cys-Ile-Glu-Asn-Ser-
Phe-Met-Thr-Ala-Ser (HF-COLL-18/514cf)

and its natural and pharmacologically compatible derivatives, especially amidated, acetylated, phosphorylated and glycosylated derivatives.

2. Fragments of the peptide according to claim 1 which are pharmacologically active.
3. A process for the preparation of the peptide according to claim 1 and/or its fragments according to claim 2, characterized in that it is prepared through prokaryotic or eukaryotic expression.
4. A process for the preparation of the peptide according to claim 1 and/or its fragments according to claim 2, characterized in that it is isolated from human blood using chromatographic methods.

5. A process for the preparation of the peptide or its derivatives according to claim 1 and its fragments according to claim 2, characterized in that said peptide or its derivatives or fragments are prepared from the amino acids contained in the stated sequence in protected form by common methods of solid-phase and liquid-phase synthesis, deprotected and purified by per se known chromatographical methods.
6. Medicaments containing the peptide according to claim 1 or its fragments according to claim 2 as the active ingredient in addition to usual excipients and additives.
7. Medicaments according to claim 6 for oral, parenteral, intravenous, intramuscular, intracutaneous, intrathecal, intranasal and local-topical application as well as in the form of an aerosol for transpulmonary application.
8. Antibodies obtainable by immunizing animals with the peptide according to claim 1 and/or fragments according to claim 2, and/or by using hybridoma technology.
9. A method for the treatment of patients in need of HF-COLL-18/514cf or its derivatives or fragments according to claim 1 by the administration of therapeutic amounts of HF-COLL-18/514cf.
10. A method for the treatment of patients in need of an inhibition of HF-COLL-18/514cf or its derivatives or fragments according to claim 1 or 2 by the administration of therapeutic amounts of an antagonist/inhibitor of HF-COLL-18/514cf.
11. Use of the medicaments according to claims 6 or 7 for the treatment of diseases of the human organism, especially in connection with capillary proliferations.

12. Use of the medicaments according to claims 6 or 7 for the treatment of diseases of the human organism, especially carcinoses.
13. Use of the medicaments according to claims 6 or 7 for the treatment of diseases of the human organism, especially involving the cardiovascular and nervous systems.
14. Use of the medicaments according to claims 6 or 7 for the treatment of diseases of the human organism, especially involving the intugement and the sense organs, especially the eyes.
15. Use of the peptide or its derivatives according to claim 1, the fragments according to claim 2 or the antibody according to claim 8 for the preparation of a medicament for the treatment of disorders in inflammatory processes, disturbed inflammatory reactions, proliferation and maturation disorders of the blood-forming system.
16. Use of the medicaments according to claims 6 or 7 or the antibody according to claim 8 for the treatment of systemic diseases in an overproduction or deficiency of HF-COLL-18/514cf, especially when, e.g., antibodies have been formed against it in former applications, or the use of HF-COLL-18/514cf in substitution therapy.
17. Use of the medicaments according to claims 6 or 7 for the treatment of chronic diseases, partially accompanied by the diseases mentioned in claims 11 to 16, by using it in a suitable form for the treatment due to electrolytic activity in tumor and vascular diseases.
18. Use of the medicaments according to claims 6 or 7 or the antibody according to claim 8 for the treatment of acute diseases as mentioned in claims 11 to 16 by using it in a

suitable form for the treatment of these diseases in intensive care.

19. Use of the medicaments according to claims 6 or 7 or the antibody according to claim 8 for the diagnosis of diseases, especially those mentioned in any of claims 11 to 16, by preparing specific antibodies against synthetic fragments or the whole peptide or its derivatives and fragments and measuring the blood concentration of HF-COLL-18/514cf by immunoassays.
20. A diagnostic agent containing the peptide according to claim 1, fragments according to claim 2 or antibodies according to claim 8 for test systems for checking the levels of this substance in tissues, plasma, urine and cerebrospinal liquor.
21. The diagnostic agent according to claim 20 as a marker for certain carcinoses and for functional disorders of blood vessels, bone marrow, lymph organs, the gastro-intestinal tract, the immune system and for inflammatory and neoplastic processes.

add
B2

add C1

SECRET